

## REMARKS

Reconsideration and the timely allowance of the pending claims, in view of the following remarks, are respectfully requested.

In the Office Action of March 16, 2007, the Examiner rejected claims 2-3, under U.S.C. §103(a), as allegedly being unpatentable over Ijima '642 (U.S. Patent No. 6,597,642) in view of Akiyama '165 (U.S. Patent No. 4,344,165).

By this Amendment, claims 2-3 have been amended to provide a clearer presentation of the claimed subject matter. Applicants submit that no new matter has been introduced.

Applicant respectfully traverses the prior art rejections, under 35 U.S.C. §103(a), for the following reasons:

### I. Prior Art Rejections Under §103(a).

As indicated above, amended claims 2 and 3 now positively recite, *inter alia*, an *adder* which *adds the first and second tracking error signals* generated by the first and second variable amplifiers to provide an added tracking error signal and a *tracking control unit* which *controls tracking by using the added error signal* provided from the adder.

These features are amply supported by the embodiments disclosed in the written description. (See, e.g., Original Specification: page 13, line 25-page 14, line 1; page 14, lines 9-24; FIGs. 3, 5, 6). For example, the disclosed embodiments provide that when the pit depth is, for example, approximately  $\lambda/6$ , the PP tracking error signal  $V_{pp}$  and the DPD tracking error signal  $V_{DPD}$  are both effective signals, and when the amplitude of the PP tracking error signal  $V_{pp}$  is not less than  $V_{ref1}$ , and the amplitude of the DPD tracking error signal  $V_{DPD}$  is not less than  $V_{ref2}$ , the  $V_{pp}$  and  $V_{DPD}$  error signals are not muted – rather, they are added together as effective signals. In this manner, it is possible to obtain the tracking signal TE with a high signal quality (large S/N ratio) and achieve a stable tracking servo.

Despite the clear claim language and supporting disclosures, the Examiner continues to assert that the Ijima '642 reference includes element 301 that allegedly discloses combining three tracking error signals. (Office Action: page 3). Applicants strenuously disagree.

That is, in contrast to the Examiner's assertions, none of the asserted references, whether taken alone or in reasonable combination, teach each and every element of claims 2 and 3, including the features identified above. In particular, Ijima '642 discloses the use of judgment circuit 301, which receives each of the tracking error signals from a differential push-pull circuit 29, a phase comparison calculation circuit 30, and a three-beam calculation circuit 31. The judgment circuit 301 then determines which tracking error signal, having an amplitude level exceeding a threshold value, is the optimum signal and then controls the selection circuit 302 to select the optimum tracking error signal. (See, Ijima '642: column 8, lines 29-40 and column 9, lines 32-37; FIG. 1).

In so doing, there is absolutely nothing in Ijima '642 that remotely teaches or suggests an *adder* which *adds the first and second tracking error signals* generated by the first and second variable amplifiers to provide an added tracking error signal - much less a *tracking control unit* which *controls tracking by using the added error signal* provided from the adder, as required by claims 2 and 3. In other words, unlike the present invention, the judgment circuit 301 does not add tracking error signals which differ in kind and fails to disclose any circuit configuration that is capable of adding such tracking error signals.

Moreover, the remaining reference is not capable of curing the deficiencies of Ijima '642 identified above, much less teach the entire combination of claim elements in its own right. In particular, Akiyama '165 only discloses that the output signals  $S_1$  and  $S_2$  delivered from the first and second photoelectric transducer units 10 and 12 are fed to a differential amplifier 14 having two input terminals to produce an tracking error signal  $S_e$  that is indicative of the difference between the levels of the signals  $S_1$  and  $S_2$ . (See, Akiyama '165: column 6, lines 8-17). As such, like Ijima '642, Akiyama '165 fails to teach or suggest an *adder* which *adds the first and second tracking error signals* generated by the first and second variable amplifiers to provide an added tracking error signal as well as a *tracking control unit* which *controls tracking by using the added error signal* provided from the adder, as required by claims 2 and 3.

For at least these reasons, Applicants submit that neither Ijima '642 nor Akiyama '165, whether taken alone or in reasonable combination, teach each and every element of claims 2 and 3. Accordingly, the immediate withdrawal of the prior art rejections of claims 2 and 3 is respectfully requested.

II. Conclusion.


All matters having been addressed and in view of the foregoing, Applicants respectfully requests the entry of this Amendment, the Examiner's reconsideration of this application, and the immediate allowance of all pending claims.

Applicant's representative remains ready to assist the Examiner in any way to facilitate and expedite the prosecution of this matter. If any point remains in issue which the Examiner feels may be best resolved through a personal or telephone interview, please contact the undersigned at the telephone number listed below.

Please charge any fees associated with the submission of this paper to Deposit Account Number 03-3975. The Commissioner for Patents is also authorized to credit any over payments to the above-referenced Deposit Account.

Respectfully submitted,

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